

CLAIMS

What is claimed is:

1. A method of gathering information about a connection between a sender and a recipient in a network comprising the steps of:

generating an information query by the sender;

sending the information query to the recipient;

receiving the information query at a border device of the recipient;

processing the information query at the border device to provide selected information requested by the information query to the sender.

2. The method of claim 1 wherein:

the selected information provided to the sender includes identification information that is different than that of the border device.

3. The method of claim 1 further comprising the steps of:

storing at least a portion of the selected information sent from the border device to the sender at the sender when a destination address of the information query corresponds to a predetermined group of addresses stored at the sender; and

utilizing the stored selected information from the response whenever an information query is generated including any of the predetermined group of addresses stored at the sender.

4. The method of claim 3, further comprising the steps of:

deleting the stored selected information after a predetermined period of time.

5. A method of gathering information about a connection between a sender and a recipient in a network comprising the steps of:

generating an information query by the sender;
sending the information query to the recipient; and
receiving the information query at a border device of the recipient;
processing the information query at the border device according to a plurality of predetermined rules,

wherein said predetermined rules provide for one of: providing selected information requested by the information query in a response to the information query to be sent to the sender; discarding the information query; and passing the information query through the border device to the recipient for response.

6. The method of claim 5 wherein:

one of said plurality of predetermined rules provides for discarding the information query when the information query is of a size larger than a predetermined range of allowable sizes.

7. The method of claim 5, wherein:

one rule of said plurality of predetermined rules provides for passing the information query through the border unit to the recipient for response when the information query includes predetermined identification information.

8. The method of claim 5, further comprising the steps of:

storing at least the selected information of the response provided from the border device when a destination address of the information query to which the response was generated corresponds to any of a plurality of predetermined addresses stored at the sender; and

using the stored selected information of the response whenever an information query including any of the plurality of predetermined addresses stored at the sender is generated rather than sending the information query to the recipient.

9. The method according to claim 8, wherein:

the stored selected information is deleted after a predetermined period of time passes.

10. A border device positioned between a sender and a recipient for use in gathering information regarding a connection between the sender and the recipient in a network, the border device comprising:

a receiver for receiving an information query from the sender addressed to the recipient;

a processor for processing the information query on behalf of the recipient to generate a response to said information query including selected information; and

a transmitter for sending the response including the selected information to the sender.

11. The border device of claim 10, wherein:

the response to the information query includes identification information that differs from identification information of the border device.

12. The border device of claim 10, wherein:

the border device responds to information queries for a plurality of recipients.

13. A method of gathering performance measurement information regarding a connection between a sender and a recipient in a network comprising the steps of:

generating an a performance measurement packet by the sender;

sending the performance measurement packet to the recipient;

receiving the performance measurement packet at a border device of the recipient; and

processing the performance measurement packet at the border device according to a plurality of predetermined rules, wherein said predetermined rules provide for one of:
generating a response packet to the performance measurement packet providing performance metric information to be sent to the sender; discarding the performance measurement packet and passing the performance measurement packet to the recipient.

14. The method of claim 13, wherein:

when the predetermined rules provide for generating the response packet to the performance measurement packet including performance metric information, the response includes identification information that is different than identification information of the border device.

15. The method of claim 13, wherein:

one of the predetermined rules provides for discarding the performance measurement packet when a size of the performance measurement packet exceeds a range of allowable

sizes.

16. The method of claim 13, wherein:

one rule of the plurality of predetermined rules provides for passing the performance measurement packet through the border unit to the recipient when the performance measurement packet includes predetermined identification information.

17. The method according to claim 13, further comprising the steps of:

storing at least the performance metric information of the response packet generated by the border device in response to the performance measurement packet when a destination address of the performance measurement packet corresponds to one of a plurality of predetermined addresses stored at the sender; and

using the stored performance metric information of the response packet whenever a performance measurement packet including any of the plurality of predetermined addresses stored at the sender is generated by the sender rather than sending the performance measurement packet to the recipient.

18. The method according to claim 17, further comprising the step of:

deleting the stored performance metric information after a predetermined period of time.

19. A method of gathering information about a connection between a sender and a recipient in a network comprising the steps of:

generating an information query by the sender;
sending the information query to the recipient;
receiving a response to the information query including selected information from the recipient by the sender;

storing at least the selected information of the response for a predetermined period of time when the destination address of the information query is one of a plurality of predetermined addresses stored at the sender, such that when a subsequent information query includes a destination address corresponding to any of the plurality of predetermined addresses, the stored selected information of the response is used without sending the subsequent information query to the recipient; and

wherein said predetermined period of time is different from a period of time for which the selected information of the response is stored when the destination address of the information query is an address other than one of the plurality of predetermined addresses.

20. The method according to claim 19, wherein:

the plurality of predetermined addresses is a group of Classless Inter-Domain Routing addresses.